

MONDAY, 28TH FEBRUARY, 1876.

WILLIAM MACLEAY, Esq., President, in the Chair.

NEW MEMBERS PROPOSED.

Eyre Goulburn Ellis and E. Reading, Esqs.

MEMBERS ELECTED.

Mr. Harrie Woods, Mr. Guilfoyle, Hon. F. Lord, Mr. Alfred Brown.

The following papers were read :—

Descriptions of Thirty-five new species of Land Shells from New Guinea, Australia, and Islands in Torres Straits, collected during the Chevert Expedition—by JOHN BRAZIER, C.M.Z.S.

THE collection of shells made during the voyage of the "Chevert" is very large, and comprises many species hitherto unknown. The arrangement and descriptions of them, which, by Mr. Macleay's desire, I have undertaken, is not, therefore, a thing that can be done in a day, or in one paper; I have accordingly limited myself in this, the first of a series of papers, to the descriptions of the new species of land shells in the collection.

1.—HELIX (RHYTIDA) BEDDOMEI.

Shell largely and openly umbilicated, rather depressly globose, very thin, obliquely closely rugosely striated on upper surface, pale yellowish brown, shining, irregularly streaked with dark yellow; apex obtuse, whorls $4\frac{1}{2}$, moderately convex, the last very large, slightly flattened and inflated in front; suture distinct, rounded at the periphery; base convex, nearly smooth, umbilicus perspective, margin smooth, aperture oblique, lunately ovate, peristome simple, pinkish within, margins approximating, the right descending in front, collumellar margin broad and reflected.

Diam. Maj. 14, min. $11\frac{1}{2}$, alt. 7 lin.

Hab. Albany Island and Cape York, North Australia.

This species is somewhat allied to *Helix Franklandensis* Forbes—it differs by being much thinner, more turbinated, coarser in sculpture, smaller umbilicus, pale yellowish, with darker radiating streaks. It was first found by Mr. C. E. Beddome, on Albany Island, some distance below the surface, amongst great quantities of volcanic scoria, and when at Cape York last July, 1875, I also found it in the same localities

2.—HELIX (RHYTIDA) JAMESI.

Shell umbilicated, flatly orbicularly depressed, very closely and finely striated, glossy, bright horn yellow, streaked with brown rays; whorls 4, slightly convex, quickly increasing, last very large and flattened in front; not descending, striæ showing more plainly at the suture, spire depressed, apex obtuse, roundly convex at the periphery, base rounded, nearly smooth, rayed as above, umbilicus wide and moderately deep, aperture diagonal, lunately oval, peristome thin, simple, margins distant, right straight, the outer arched, columellar slightly reflected.

Diam. Maj. $10\frac{1}{2}$, min. $8\frac{1}{2}$, alt. 4 lin.

Hab. Palm Island, North-east Australia.

This species approaches to *Helix capillacea* Fer. It differs by being flatly depressed, nearly smooth, showing very faint silky lines, at the suture they become more like fine ribs; colour different, and rayed with brownish-yellow; umbilicus much wider, and in all respects a much thinner shell. Five specimens found under stones in the thick jungle.

3.—HELIX (RHYTIDA) HOBSONI.

Shell umbilicated, rather flatly orbicularly depressed; thin, glossy, dark-yellowish horn, nearly smooth, faintly striated, with numerous irregular dark radiating rays; whorls 3 to $3\frac{1}{2}$, slightly convex, last large, depressed above, descending a little in front, spire slightly elevated, apex obtuse, suture impressed, periphery roundly convex, base convex, smooth, umbilicus large, perspective, regularly rounded at the margin, aperture somewhat oblique, lunately oval, interior pink, peristome simple, thin, margins approximating, columellar margin thinly expanded.

Diam. Maj. $4\frac{1}{4}$, min. $3\frac{1}{2}$, alt. 2, lin.

Hab. Palm Island, North-east Coast of Australia.

This species varies in colour from bright chestnut to yellowish-brown, and has dark irregular radiating rays. Ten specimens found.

4.—HELIX (THALASSIA) ANNULUS.

Shell minutely perforated, depressed, thin, transparent, smooth, shining olivaceous or yellowish horny, spire moderately conical, apex obtuse, whorls 5, slightly convex, periphery rounded, above banded with one dark-brown band running into the suture and spirally to the apex; base convex, smooth, umbilicus minute, shallow, aperture nearly diagonal, lunate, peristome simple, acute, margins distant, the right thin, the columellar margin whitish, thickened, slightly reflected.

Diam. Maj. $6\frac{1}{4}$, min. $5\frac{1}{2}$, alt. 3, lin.

Hab. Banks of Katow River, New Guinea.

This thin transparent species was found at the village of Marrahata, mouth of Katow River, near the seashore, in moist places under cocoanut trees, living in clusters inside of old cocoa husks. Three dead and one living specimen were found at Dungeness Island, Torres' Straits, about 40 miles south from Katow. They may have been carried on drift timber and palm roots which are to be seen floating in the Straits after the North-west Monsoons.

5.—HELIX (THALASSIA) SAPHO.

Shell perforated, orbicularly depressed, thin, sub-pellucid, nearly smooth, glossy, horny, whorls $4\frac{1}{2}$, slightly convex, the last large and rounded at the periphery, suture flattened, spire obtuse, base convex, having striæ running into the umbilicus, aperture diagonal, ovately lunate, peristome thin, margins distant, the upper and outer very thin, columellar margin thickened into a white callus, grooved in the middle, reflected partly over the umbilicus like a spout.

Diam. Maj. $3\frac{1}{4}$, min. $2\frac{3}{4}$, alt. $1\frac{3}{4}$ lin.

Hab. Yule Island, New Guinea.

A simple horny shell, slightly shining, with a callus like tooth divided, and turned back like a spout.

6.—HELIX (DISCUS) LOMONTI.

Shell umbilicated, very much depressed, lenticular, thin, pellucid, light brown, rather obliquely striated, whorls $5\frac{1}{2}$, flattened, the last sharply keeled, suture with narrow margin, base slightly convex, umbilicus large, wide open, aperture diagonal, compressly ovate, peristome thin, acute, margins distant, columella thickened.

Diam. Maj. 6, min. $5\frac{1}{2}$, alt. $1\frac{1}{2}$ lin.

Hab. Yule Island, New Guinea, found under decayed timber.

A thin, flat, depressed, pellucid, light brown species comes in the section with *Helix Merziana* and *Swainsoni*, Pp.

7.—HELIX (CONULUS) MAINO.

Shell minutely perforated, globosely conical, thin, shining, hyaline, pale horny (under the lens), marked with fine oblique silky striæ, and minute spiral lines, whorls $5\frac{1}{2}$, gradually increasing, roundly convex, the last large and inflated, faintly keeled at the periphery, base convexly rounded, with the striæ more coarse than above, aperture nearly vertical, ovate, peristome simple, thin, acute, margins distant, columellar margin reflected covering one-fourth of the minute umbilicus.

Diam. Maj. 2, min. $1\frac{3}{4}$, alt. 2 lin.

Hab. Yule Island, New Guinea, found on trees.

The sculpture of this pretty little species comes out beautifully when placed under the microscope, the striæ being as fine as silk. Seventeen specimens only found on trees in the thick jungle.

8.—HELIX (CONULUS) REEDEL.

Shell minutely perforated, globosely conical, thin, shining, light brown (under the lens), marked with fine oblique silky striæ, and minute spiral lines, whorls 5, roundly convex, the last large, crenulated at the suture, spire conoid, apex obtuse, obsoletely keeled at the periphery, base convex, pale yellowish horn, marked with spiral striæ, aperture diagonal, roundly lunate, peristome simple,

thin, acute, margins distant, columellar margin slightly dilated, covering half the umbilicus.

Diam. Maj. $2\frac{1}{4}$, min. $1\frac{3}{4}$, alt. 2 lin.

Hab. Darnley Island, Torres Straits; found on the leaves of trees on the most elevated peak of the Island.

The upper half of this species is of a light brown, the lower half pale yellowish horn, having the peculiar minute spiral decussating lines giving a fenestrated appearance to the shell.

9.—*HELIX (CONULUS) DARNLEYENSIS.*

Shell imperforated, globosely conical, thin, hyaline, pale horny, faintly marked with silky striæ, rather oblique, whorls 4, roundly convex, the upper one spirally sculptured with fine lines, the last large and inflated, suture deeply impressed, spire conoid, apex obtuse, periphery rounded, base convex, marked with spiral lines, aperture oblique, somewhat ovate, peristome simple, thin, margins distant, columellar rather straight with a thin reflected plate on the imperforation.

Diam. Maj. $2\frac{1}{2}$, min. 2, alt. 2 lin.

Hab. Darnley Island, Torres Straits; found on trees.

10.—*HELIX (CONULUS) BARNARDENSIS.*

Shell minutely umbilicated, turbinately globose, thin, white, transparent, regularly minutely finely striated, whorls 4, convex, spire conoid, apex obtuse, slightly keeled at the periphery; base convexly rounded, smoother than above, aperture vertical, somewhat squarely ovate, margins distant, the columellar margin dilated and reflected covering one-fourth of the umbilicus.

Diam. Maj. 1, min. $\frac{3}{4}$, alt. 1, lin.

Hab. Barnard Islands, No. 3, North-east Coast of Australia.

11.—*HELIX (CONULUS) NEPEANENSIS.*

Shell minutely umbilicated, turbinately depressed, thin, yellowish brown, coarsely obliquely striated, whorls 5, convex, the last large, suture distinct, spire conoid, apex obtuse, small minute callus-like keel at the periphery; base rounded, marked with fine striæ, aperture diagonal, roundly lunar, peristome thin, simple, margins distant, columellar margin rather thickened and slightly reflected.

Diam. Maj. $1\frac{3}{4}$, min. $1\frac{1}{2}$, alt. 1 lin.

Hab. Nepean Island, also Cococanut Island, Torres Straits, under leaves on the ground.

This species is allied to *Helix Russelli*, Brazier, but may be distinguished by its coarser sculpture. About forty specimens found at the localities given above.

12.—HELIX (CONULUS) STARKEI.

Shell minutely umbilicated, turbinately depressed, thin, reddish-brown, obliquely marked with rib-like striæ, interstices showing faint indications of smaller lines, whorls 5, roundly convex, suture deep, spire somewhat conoid, apex obtuse, periphery minutely keeled, base convex, marked with striæ finer than above and crossed with minute spiral silky lines; umbilicus deep, rounded at the margin, aperture oblique, roundly lunate, peristome thin, simple, margins distant, columellar nearly straight and reflected.

Diam. Maj. $1\frac{3}{4}$, min. $1\frac{1}{2}$, alt. $1\frac{1}{4}$ lin.

Hab. Yule Island, New Guinea.

One specimen found under decayed leaves on the ground. The sculpture of it is very remarkable, above quite rough rib-like, and from the centre nearly smooth, crossed with fine spiral lines running into the umbilicus.

13.—HELIX (PATULA) SPALDINGI.

Shell rather broadly and perspectivevely umbilicated, depressly orbicular, thin, translucent, not shining, rather white, irregularly obliquely rugosely striated, interstices smooth, spire moderately flattened, apex obtuse, suture deep, whorls $3\frac{1}{2}$, scarcely convex, last rather large and inflated, angled above, rounded at the periphery, base roundly convex, umbilicus half the width of the shell, somewhat deep and rounded at its margin, aperture nearly vertical, sub-circular, peristome thin, acute, margins approximating, the right straight, columellar margin slightly reflected.

Diam. Maj. $2\frac{1}{4}$, min. $1\frac{3}{4}$, alt. $1\frac{1}{4}$, least alt. $\frac{3}{4}$, lin.

Hab. Cape York and Albany Island, North Australia; also Bet, Sue, Cocoa Nut, and Warrior Islands—Torres Straits, under leaves and decayed wood.

This species approaches near to *Helix perspectiva*, Say, found in North America. Cape York and Albany Island specimens run large, from the other islands much smaller.

14.—*HELIX* (*CONULUS* ?) *PORTI*.

Shell imperforated, turbinately globose, thin, shining, transparent, horny yellow, regularly marked with very fine oblique striæ, transversely striated, giving the shell the appearance of being granulated; whorls, $3\frac{1}{2}$, roundly convex, spire conoid, apex roundly obtuse, suture distinct, roundly convex at the periphery, base convex, with spinal striæ, aperture diagonal, lunately rounded, peristome thin, acute, margins distant, columellar margin rather thickened into a minute callus plate.

Diam. Maj. $\frac{3}{4}$, min. $\frac{1}{2}$, alt. $\frac{3}{4}$.

Hab. Albany Island, North Australia.

Only one specimen found amongst a vast quantity of volcanic scoria.

15.—*HELIX* (*CONULUS* ?) *GRENVILLEI*.

Shell as seen under the lens, imperforated, turbinately depressed, thin, transparent, reddish, spirally striated, whorls $3\frac{1}{2}$, convexly rounded, studded with three rows of spiral stunted hairy bristles, not seen on the upper whorls, rather obliquely rugosely striated at the suture, spire moderately conoid, obtuse at the apex, periphery rounded, base convex, marked with fine striæ, aperture nearly vertical, ovately rounded, peristome thin, simple, acute, margins distant, the right very thin.

Diam., Maj., $\frac{3}{4}$ min. $\frac{1}{2}$ alt. $\frac{1}{2}$ lin.

Hab. Home Islands, off Cape Grenville, North East Australia.

Characterised by bristly hair on the centre of the last whorl, and resembles, in miniature, the *Helix aculeata*, Muller, from Europe. One specimen only found under leaves.

16.—*HELIX* (*OCHTNEPHILA*) *D'ALBERTISI*.

Shell umbilicated, pyramidally conical, thin, light reddish brown, hyaline, spire raised, apex white, acute, whorls $8\frac{1}{2}$, slightly convex, the upper half closely, obliquely, rugosely lined, the lower

spirally granulated, suture channeled, crenulated, below small minute holes, having raised like callus at their edge, periphery with small keel, divided and crenulated, base convex, more rugose than upper surface, umbilicus rounded, small, and deep, minute holes round the edge, aperture oblique, nearly circular, peristome thin, margins continuous, with thin deposit of callus on the body whorl; columellar margin slightly reflected over the umbilicus.

Diam. Maj. $3\frac{3}{4}$, min. $3\frac{1}{2}$, alt. 4 lin.

Hab. Yule Island, New Guinea.

17.—*HELIX (HADRA) PALMENSIS.*

Shell umbilicated, globosely turbinated, finely striated, the whole surface marked with minute zig-zag and lengthened grains, giving the shell a granulated appearance, reddish yellow, with numerous spiral chestnut lines and bands, very dark at the mouth, whorls 6, slightly convex, the last convex above, deflected in front, suture crenulated and encircled with a dark blackish band; spire conical, apex obtuse, base rounded, marked as above, having coarser lines entering the umbilicus, with a dark broad band round it, aperture somewhat diagonal, ovately lunate, within shining livid hue, peristome blue-black, thick, and broadly expanded and reflected, margins approximating, the right descending at the upper part, and connected by a thin callus; columellar margin very much thickened and expanded half over the umbilicus.

Variety. Yellowish, with one band one line wide on the periphery, running spirally to the apex, with another broad one at the suture, nearly obsolete on the second whorl, peristome lightish brown, very dark behind, dark reddish brown round the umbilicus.

Diam. Maj. 23, min. 18, alt. 17 lines.

Hab. Palm Island, North-east Australia; found under stones and rocks in the thick jungle.

18.—*HELIX (GEOTROCHUS) YULENSIS.*

Shell imperforated, conic, trochus shaped, rather thin, obliquely finely striated and obsoletely granulated; whitish, ornamented

with small long narrow light reddish streaks and spots, more numerous towards the upper part, spire conoid, rather acute, whorls 4 to $4\frac{1}{2}$, slightly convex, the last more convex, marked round the periphery, which is acute with a broad white opaque band, base convex, with obsolete white bands, interior and columellar pink, peristome jet black, aperture oblique, triangularly ovate, margins approaching, right bisinuated and contracted in front, thickened and reflected.

Diam. Maj. $10\frac{1}{2}$, min. $8\frac{1}{4}$, alt. 6.

Hab. Yule Island, New Guinea.

This interesting species differs from anything known to me from New Guinea, it is so variable in colour. Some specimens have the light reddish streaks obliquely placed, and destitute of the opaque white lines running spirally inwards on the body whorl and the fine rose tint round the columellar and interior of the aperture; peristome at the periphery twisted and bisinuated inwards.

19.—HELIX (GEOTROCHUS) STRABO.

Shell imperforated, conic, somewhat trochus shaped, thin, finely striated, and obsoletely spirally marked with lengthened granulations; bright straw yellow, spire conoid, apex acute, whorls 4; slightly convex, the 3 upper nearly smooth, suture channelled, periphery sharply keeled, rounded in front, base convex and marked with faint white opaque lines; aperture oblique, triangularly ovate, peristome expanded and reflected, rose pink, margins distant, the right bisinuated inwards at the front, columellar margin regular and reflected.

Diam. Maj. 11, min. $8\frac{1}{4}$, alt. $6\frac{1}{2}$ lin.

Hab. Katow River, New Guinea; found on trees.

This is another curious form, having the centre or outer margin of the peristome bright rose colour and formed like a spout, and between the margins and on the base a faint blotch of rose pink. Only three specimens found on the banks of the above river.

20.—HELIX (GEOTROCHUS) SICULUS.

Shell narrowly umbilicated, depressly globose, rather solid, finely striated, pale brown, ornamented with three chestnut bands, two

narrow and one broad contiguous to that at the suture; spire conoid, apex dark brown, obtuse, whorls 5, slightly convex, rounded at the periphery, convex at the base, ornamented with eight narrow spiral chestnut lines; aperture diagonal, roundly lunate, peristome rose pink, slightly expanded and reflected, columellar dilated and reflected, concealing one-fourth of the umbilicus.

Variety. With chestnut band on the periphery, and running spirally round the suture to the apex.

Diam. Maj. 10, min. 8, alt. $6\frac{1}{2}$ lines.

Hab. Banks of Katow River, New Guinea.

Two specimens only found of this species on trees.

21.—HELIX (GEOTROCHUS) BRAZIERÆ.

Shell with covered umbilicus, depressly conical, rugosely obliquely and spirally striated, yellowish-brown, marbled with blackish-brown flames, whorls 4 to $4\frac{1}{2}$, convex, the last large, descending in front, apex conoid, obtuse, upper whorl nearly smooth, brown, periphery moderately rounded, base convex, marked as above, aperture oblique, lunately ovate, peristome white, thickened and reflected, interior of aperture bright brown, margins approximating, the right descending, columellar margin thickened, dark-brownish and expanded over the umbilicus.

Diam. Maj. 13, min. $10\frac{1}{2}$, alt. $8\frac{1}{2}$ lin.

Hab. Yule Island, New Guinea, found on trees.

This species resembles in its markings *Helix Lombeï*, Pfr. from Solomon Islands.

22.—HELIX (GEOTROCHUS) ZENO.

Shell imperforated, globosely turbinated, obliquely and transversely minutely rugosely grained, thin, flesh colour, encircled with eleven dark-brown bands having white between; in front all run into one, spire short, apex obtuse, rose pink, whorls $4\frac{1}{2}$, convex, the last large, deflected in front, constricted behind the aperture, which is oblique and somewhat square, peristome purple black, margins approximating, and joined by a thin callus, the right de-

scending, collumellar margin with sub-erect elongated tooth like callosity of a rose pink much dilated and reflected.

Diam. Maj. 17, min. $13\frac{1}{2}$, alt. $1\frac{1}{4}$ lin.

Hab. Hall Sound, New Guinea.

Two dead specimens found in the thick forest on high ridges.

23.—BULIMUS MACLEAYI.

Shell minutely perforated, ovately conical, very thin, shining, transparent, finely striated and obsoletely transversely lined, horny or tawny throughout, whorls $5\frac{1}{2}$, convex, the last large and inflated little more than half the whole length, spire rather long, apex acute, base rounded, aperture somewhat oblique, elongately oval, peristome simple, regular, thin, nearly straight, margins regularly arched, collumellar margin with thin plate expanded and reflected over the umbilicus.

Length $7\frac{1}{2}$, breadth 4, height $3\frac{1}{2}$, length of aperture $4\frac{1}{4}$, width $2\frac{3}{4}$ lines.

Hab. Yule Island, New Guinea.

This species is found on trees in the wet season, and in the dry in the crevices of coral forming the east side of the island.

24.—TORNATELLINA MASTERSI.

Shell imperforate, somewhat ovate, very thin, transparent, slightly shining, horny green, faintly and transversely striated, whorls 5, convex, that last large and inflated, equalling half the length, suture impressed, spire conoid, apex obtuse, base rounded, aperture vertical, ovate, peristome thin, simple, long, narrow, minute-like callus tooth on the centre of the body whorl; whitish, margins regularly arched, the columellar margin white, thickened with callus, twisted, divided in the middle and entering spirally inwards, leaving a deep groove; above reflected at its outer edge.

Length $1\frac{1}{4}$, breadth $\frac{3}{4}$ line.

Hab. Darnley Island, Torres Straits.

This species is of a very dull colour, more so than any of the other species described in this paper. Eighteen specimens found on trees at 600 feet elevation, the highest part of the island.

25.—*TORNATELLINA GRENVILLEI*.

Shell imperforated, oblong, ovate, thin, glossy, transparent, light horn colour, obliquely striated, decussated with minute silky lines; whorls 5, roundly convex, suture distinctly impressed, spire conoid, apex obtuse, base convex, aperture somewhat diagonal, elongately oval, peristome thin, simple, straight, margins regularly arched, the columellar margin thickened with callus, twisted, reflected and running spirally inwards, joining the thin white lunate-shaped tooth placed in the body whorl.

Length $1\frac{1}{2}$, breadth $\frac{3}{4}$ line.

Hab. Home Islands, North East Australia; Albany Island, Cape York.

26.—*TORNATELLINA PETTERDI*.

Shell imperforate, oblong turreted, very thin, transparent, shining, smooth, light yellowish horny, whorls 5, convex, last equalling half the length, spire moderately elongated, obtuse at the apex, aperture nearly vertical, ovate, small thin tooth placed in the centre of the body whorl; columellar thickened, twisted, the edge entering spirally inwards leaving a deep groove above, peristome thin, simple.

Length $1\frac{1}{2}$, breath 1 line.

Hab. Darnley Island, Torres Straits; found on trees.

27.—*TORNATELLINA TERRESTRIS*.

Shell imperforated, overtly conical, thin, translucent, rather smooth, obsoletely striated and spirally lined with silky striæ; pale horny, whorls $3\frac{1}{2}$, roundly convex, the last large and globosely inflated, suture impressed, spire short, obtuse at the apex, aperture very slightly oblique, roundly ovate, small nearly obsolete thin long tooth on the centre of the body whorl; peristome thin, acute, margins regular, the columellar rather thickened, straight, with a thin long broad plate, sub-twisted and bent in the centre entering spirally inwards, as seen from the inside, fine decussating lines all through.

Length $1\frac{1}{2}$, breadth 1 line.

Hab. Yule Island, New Guinea; found on the ground under leaves.

28.—TORNATELLINA EUCHARIS.

Shell imperforated, somewhat ovately conical, thin, transparent, glossy, very finely striated and decussated with finer striæ; pale straw colour, whorls $3\frac{1}{2}$, convex, the last large and inflated, three-fourth the whole length, spine very short, apex roundly obtuse, thickened long callus tooth on the centre of body whorl entering spirally; base rounded, aperture nearly vertical, ovate, peristome membranous, margins regular, the outer arched, columellar twisted, rather thickened, entering spirally inwards, leaving about it a small groove.

Length $1\frac{1}{4}$, breadth 1 line.

Hab. Barnard Islands No. 3, North-East Australia.

This graceful species is closely allied to *Tornatellina terrestris* Braz., two specimens found on bushes at the above Islands.

29.—PUPA (VERTIGO) MACLEAYI.

Shell sinistral, perforated, ovately oblong, very thin, shining, white, hyaline, finely striated, crossed with spiral striæ, whorls 5, convexly rounded, two centre large and ventricose, two upper small, the last very small, somewhat compressed; aperture small, squarely oval, longer than broad, having 7 teeth, 3 on the centre of the body whorl, the centre one elongated curved and rounded, small one to the right and left, one long and broad on the inside of the columella, three more situated inside the base, centre one deep down opposite the one on the body whorl; margins continuous, the right slightly angled at the suture, joining the minute tooth above, peristome thin and reflected, broadly expanded over the perforation.

Length 1, breadth $\frac{1}{2}$ line.

Hab. Bet, Sue, Nepean, Dungeness, and Warrior Islands, Torres Straits.

30.—PUPINA CROSSEI.

Shell oblong, ovate, solid, polished, shining, pellucid, smooth, glossy, white or reddish horny, whorls 5, moderately convex, the last in front small, penultimate little more than equal to those above, aperture circular, vertical, produced rather obliquely out

wards ; peristome and auricles white, thickened, slightly expanded, the upper oblique, with narrow cut to the suture, covered by a large curved somewhat triangular callus plate, extending to the centre of the whorl, deflected at the edge, the lower canal cutting the columellar horizontally, having a small impressed plate above.

Length $3\frac{1}{4}$, breadth 2, height $1\frac{3}{4}$, aperture 1 line.

Hab. Palm Island, North-East Australia.

The auricle at the upper part of the lip is the chief character in this species ; it is cut to the suture, and the auricle extends up to the centre of the penultimate whorl. It and *Pupina Thomsoni* Forbes, need never be confounded with any other Australian species. Four specimens found under decayed leaves, in wet ground.

31.—PUPINELLA CROSSEI.

Shell perforated, ovately oblong, rather thick, smooth, whitish to pale reddish horny, very finely striated, whorls 6 to $6\frac{1}{2}$, convexly rounded, suture deep, spire tapering, obtuse at the apex, aperture nearly vertical, circular, peristome continuous, with callus deposit on the upper front, outer lip very much thickened, reflected white, columellar slightly produced in the centre, having a small narrow fissure nearly horizontal and entering spirally ; umbilicus small, bordered below by a well marked obtuse keel continuous with the spiral canal.

Length 6, breadth $2\frac{1}{4}$, height $2\frac{1}{4}$, aperture $1\frac{1}{4}$ lines.

Hab. Yule Island, New Guinea.

This species is characteristic of the genus, having a narrow spiral canal at the base of the columellar, and the umbilicus bordered with an obtuse keel, which forms the outside of the narrow canal at the base of the columellar ; it reminds one of the genus *Cataulus*, with its keel. Named after Mr. H. Crosse, of Paris, Director of the French *Journal de Conchyliologie*.

32.—HELICINA COXENI.

Shell trochiform, rather solid, reddish, marbled with opaque white, spirally rugosely striated, whorls $4\frac{1}{2}$, flattened, the last large, somewhat angular in front, spire conoid, apex rather acute,

periphery carinated, more distinctly in front on body whorl; base convex, with finer lines, interior reddish brown, aperture diagonal, triangular, peristome white, thickened, shortly expanded, angular above, roundly produced in front, rounded below, joining the columellar, which is rather straight, having a callus deposit.

Diam. Maj. $5\frac{1}{2}$, min. $4\frac{1}{2}$, alt. 4 lin.

Hab. Yule Island, New Guinea, found under leaves on the ground.

33.—*HELICINA MACLEAYI*.

Shell depressly globose, rather solid, somewhat rugosely striated, having obsolete spiral ribs, intersected by minute decussating lines, bright yellowish reddish or reddish brown, whorls $4\frac{1}{2}$, slightly convex, the last obscurely angled, suture deep, spire short, apex papillose smooth, periphery slightly carinated, base with finer striae, aperture diagonal, triangularly ovate, peristome white, thickened and reflected, the columellar margin thickened with a granulated deposit on the body whorl nearly extending up to the right margin of the peristome; operculum light brown, concave, minutely granulated, inner edge very much thickened, outer thin.

Diam. Maj. 2, min. $1\frac{3}{4}$, alt. $1\frac{1}{2}$ to $1\frac{1}{4}$ lin.

Hab. Barnard Islands, No. 3, North-East Australia, found near the beach under dead leaves and broken coral.

34.—*HELICINA MAINO*.

Shell conoid, thin, shining, glossy, transparent, flesh colour, having fine zig-zag white opaque lines with bright reddish streaks spirally striated; whorls $4\frac{1}{2}$, flattened, the last equalling more than half the whole length, suture moderately impressed, spire conoid, apex pointed and granulated, periphery rounded, base convex, more opaque than above, with thin granulated callus between the margins, aperture oblique, somewhat triangular, peristome granulated, slightly thickened and reflected, white, roundly produced in front, triangular at the columellar which is thickened, interior light reddish; operculum yellowish brown, concave in centre, surface granulated.

Diam. Maj. 3, min. $2\frac{1}{2}$, alt. $2\frac{1}{2}$ lin.

Hab. Katow, New Guinea, only one specimen found.

35.—CYCLOPHORUS (DITROPIS) BEDDOMEI.

Shell sub-orbicular, depressed, thin, whitish brown, striæ rather rugose, whorls $3\frac{1}{2}$, the last large and flattened in front, having two distinct spiral keels, one above the periphery and contiguous to the suture, the other below, leaving a passage between them ; the upper whorls smooth and convex, spire short, apex obtuse, base angular, umbilicus wide and deep, encircled with a keel, and having one well down, aperture oblique, somewhat circular, peristome thickened, brown, margins approximating and joined by a thin callus plate, the right or upper considerably thickened, the basal margin produced outwardly, columellar hollowed out and slightly reflected at the umbilicus.

Diam. Maj. $\frac{3}{4}$, min. $\frac{2}{3}$, alt. $\frac{1}{2}$ lin.

Hab. Cape York, North Australia.

This species differs from *Cyclophorus Whitei*, Brazier, by being more depressed, the keels only being contiguous to the suture of the last whorl, and in the upper whorls being smooth, and the peristome thicker ; it is in all respects a smaller shell.

Notes on a collection of geological specimens collected by WILLIAM MACLEAY, Esq., F.L.S., President of the New South Wales Linnean Society, Sydney, from the coasts of New Guinea, Cape York, and neighbouring islands—by C. S. WILKINSON, Government Geologist.

I have lately examined a small collection of geological specimens, brought from the coast of New Guinea, by the President of this Society, Mr. William Macleay, and which were collected by him when on his recent tour of exploration in the Chevert.

These specimens consist of—

1. Quartz porphyry (Palæozoic), from Cape York, found underlying beds of Tertiary ferruginous sandstone.
2. Vesicular basalt and brecciated volcanic tufa (Upper Tertiary), from Darnley Island.